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K-65 EE/CA

9-5-90

OEPA/DOE

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LETTER



State of Ohio Environmental Protection Agency

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Richard F. Celeste
Governor

September 5, 1990

RE: K-65 EE/CA

Mr. Bobby Davis
U.S. DOE - FMPC
P.O. Box 398705
Cincinnati, Ohio 45239

Dear Mr. Davis:

At the meeting with your staff in Chicago on August 28, 1990, Ohio EPA expressed concern over the K-65 EE/CA's elimination of viable alternatives because they were not protective in the event of a tornado. While we too are concerned about tornados, we believe the risk should have been given a weight consistent with the low probability of a tornado. It is possible that superior alternatives were discounted. Also, the long range impacts (including a significant increase in the contaminated waste volume) might not be worth the tornado protection. It is important to note that DOE is not planning to (nor are we suggesting that they should) protect other areas of FMPC (i.e. Plant 1 pad, thorium storage buildings) from tornados.

In any event, DOE presented to Ohio EPA and USEPA in Chicago last week a plan to add four feet of bentonite to the K-65 silos. It became clear from the discussion that if this proposal was not accepted by Ohio EPA and USEPA, DOE would not be able to implement another alternative because of the time needed to reevaluate alternatives discarded early in the process. Because the remedial process is moving forward (Proposed Plan due January 16, 1991), we agree it is important to take some action now to protect workers, residents and the environment from ongoing radon emissions and emissions that could occur from structural failure of the domes.

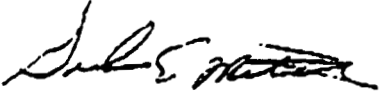
To this end, this letter will serve as Ohio EPA's conditional approval of the K-65 EE/CA. A layer of bentonite (depth to be determined) will be added to each of the silos. The conditions for this approval are attached. DOE should address these conditions in writing within 30 days of the date on this letter.

Mr. Bobby Davis
September 5, 1990
Page Two

1711

If you have any questions about these conditions, please contact me.

Sincerely,



Graham E. Mitchell
DOE Coordinator

GEM:nys

cc: Richard Shank
Tom Winston
Catherine McCord, USEPA
Jack Van Kley, Ohio A.G.
Robert Owen, ODH
Lisa August, Geotrans

OHIO EPA CONDITIONS FOR APPROVAL OF THE ADDITION
OF BENTONITE TO K-65 SILOS

1. DOE shall provide a range of cost estimates for the final disposal of bentonite added to the K-65 silos. These estimates should include estimates for 1, 2, 3 or 4 feet of bentonite added to each silo for on-site and off-site disposal options. Make sure these estimate ranges consider that this material may need to be disposed of as if it were "high level waste".
2. DOE shall add bentonite slurry to the silos only after sampling results indicate that the residues have the ability to support the weight of bentonite. DOE shall discuss how the bentonite slurry will be maintained and how moisture content will be determined. Discuss the issue of whether or not the K-65 residues will dissolve or mix with the bentonite slurry. DOE should also be able to state that no further sampling of residues will be needed.
3. DOE shall add bentonite slurry to the silos only after the borings around and under the silos are conducted and the results are analyzed to determine any possible impact on groundwater of adding bentonite and possibly additional water to the silos. The information shall be submitted to Ohio EPA.
4. The concept of waste minimization shall be considered in selecting the amount of bentonite to be added to the K-65 silos. This is especially true considering that this is a removal action and final remediation is expected to begin within the next 3 years.
5. DOE shall state whether or not the construction of the air-tight enclosure (ATE) will be necessary for the installation of the bentonite. Will the existing radon treatment system be able to control radon during bentonite installation?
6. All work plans, monitoring plans, schedules and bentonite radon attenuation data, shall be submitted to Ohio EPA for review comment and approval.
7. DOE needs to clarify the emergency responses the site will take in the event of dome failure. The EE/CA states that sand will be added to cover the wastes. Mr. Jack Craig stated in Chicago on August 28, 1990, that the site emergency plan states that water will be added to cover the wastes. What is the actual approved procedure? What is the best emergency procedure?